CENTER FOR ARMY LESSONS LEARNED (CALL)

News from the Front!

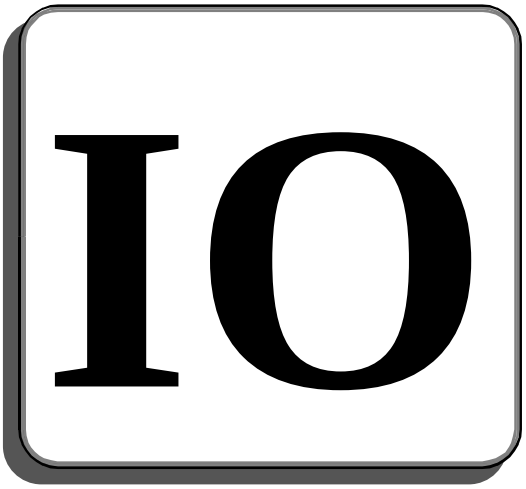
MAR-APR 98

IN THIS ISSUE!

The Information Operations Process
Development of a Media Visit Itinerary
Digital Technology, Engineers and Peacekeeping
Battles from Cortina
Preparing a Unit for Barge Loading - One Battalion's Experience
Combat Casualty Care in Stability and Support Operations
Thirty Years Late, but Ready to Serve - The South African Nyala
Demining Operations Using the Minebreaker 2000 System in Bosnia

The Information Operations Process

by LTC (Ret) Craig Jones (previously assigned to the IO Division, HQDA)



Within the past two years, much has been written and said about Information Operations (IO). **FM 100-6,** ***Information Operations,*** was published, and IO found its way into the Army lexicon. Still much confusion remains—IO is still many different things to many different people. And the fact is IO includes a broad range of diverse disciplines and activities. Using information systems, protecting information systems, conducting deception all run the gamut of IO. This article focuses on one aspect of IO. My purpose is to offer prospective IO staff officers a methodology—a template for planning, implementing, and evaluating what I call the perception management piece of IO. Hopefully, this article will also be of use to those individuals working with the IO staff officer. Personnel in support of the IO staff officer must be knowledgeable of his role in IO. It is understandable that these individuals, knowing that the U.S. Army has been conducting PSYOP, deception Electronic Warfare, OPSEC, and physical destruction for a long time, would want to know what is different now. The foundation of this article is based on personal observations of Task Force Eagle's IO cell in Bosnia during December 1997 and the work done by LTC Garry Beavers and LTC (Ret) Stephen Shanahan of the Land Information Warfare Activity (LIWA).[1]

[1] LTC Garry Beavers and LTC Stephan Shanahan, U.S. Army, Ret, ***"Operationalizing IO in Bosnia-Herzegovina,"*** Land Information Warfare Activity, Ft. Belvoir, VA.

Perception Management: **Actions to convey or deny selected information and indicators to foreign audiences to influence their emotions, motives, and objective reasoning; and to intelligence systems and leaders at all levels to influence official estimates, ultimately resulting in foreign behaviors and official actions favorable to the originators objective.** ***(Joint Pub 1-02)***

Scenario

JTF Falcon has the mission to conduct Peace Operations in the former Soviet Republic of Ubilestan. The JTF's IO staff officer, augmented with a team from the Joint Command and Control Warfare Center (JC2WC), has developed an IO campaign plan to support the CINC's Campaign Plan. To execute the objectives in the IO campaign plan, a series of IO programs will need to be developed by the subordinate Land Component Command (LCC). The Commander of the LCC wants an IO plan, which will support the JTF's IO campaign plan, but will also assist him in accomplishing his mission of protecting lives and property in case of riots in the multi ethnic city of Tajmil. Municipal elections will be held in 90 days, and the concern exists that the losing political party will instigate riots after the election results are announced. The Armor Division (AD), forming the LCC for JTF Falcon is combat ready, and has enough fire power to quell any riot, but the commander would prefer to avoid using force. Thus, he wants his IO staff officer to develop and execute an IO plan that will assist his diplomatic efforts in preventing the citizens in and around Tajmil from rioting.

Organization

The division's IO cell is comprised of the Division's IO officer and a three-man Field Support Team (FST) from the LIWA. The FST provides expertise in deception, OPSEC, and tools for IO modeling, targeting, and synchronization. One can see that the IO cell is not large enough, nor does it possess the skills in all the C^2W elements to plan and execute all the necessary IO. For the division to have an IO capability that is robust and fully integrated and synchronized, the IO officer uses the Information Operations Working Group (IOWG). The composition of the IOWG is mission contingent. In our scenario, it is comprised of representatives from the IO cell, G3 Plans, G2 Plans, Public Affairs, Civil Affairs (CA), G6, PSYOP, Electronic Warfare, Staff Judge Advocate, Political Advisor (POLAD), Special Operations Command and Control Element (SOCCE), Provost Marshal Office (PMO), and Counterintelligence. In his role as facilitator, the IO officer ensures that the talents and creativity of the individual members of the IOWG are fully exploited in achieving the IO objectives. The following IO process provides the IO officer with a template for conducting Information Operations.

IO Process

The IO process is a 12-step method that forms a template for planning, implementing, and evaluating IO. It is not doctrine, and it differs, albeit slightly, from the one being used by the LIWA in Bosnia, but it is offered here as a point of reference. Hopefully, this article will lead to further discussion and improvements in IO modeling and Measures of Effectiveness (MOE), which, in my opinion, are the two major shortfalls in the execution of IO. The reader should keep in mind that what Joint Pub 3-58 says of deception planning is true of the IO Process: ***"Although diagrams of planning processes are useful in aiding the understanding of the individual elements of the process, it must be remembered that processes are seldom as linear as diagrams or flow charts may imply. Planners must be prepared to respond to the dynamics of the situation and of their own headquarters."*** What follows are the 12 steps that the IO cell and the IOWG must follow to achieve effective Information Operations.

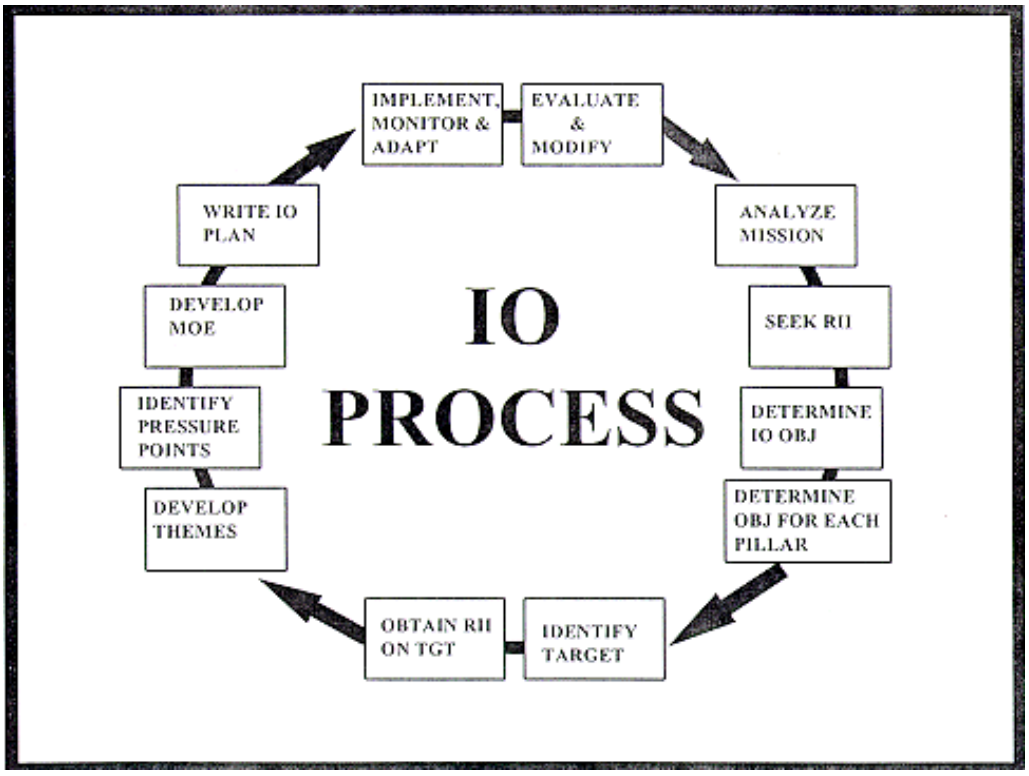

IO
PROCESS
IMPLEMENT, MONITOR & ADAPT
EVALUATE & MODIFY
ANALYZE MISSION
SEEK RII
DETERMINE IO OBJ
DETERMINE OBJ FOR EACH PILLAR
IDENTIFY TARGET
OBTAIN RII ON TGT
DEVELOP THEMES
IDENTIFY PRESSURE POINTS
DEVELOP MOE
WRITE IO PLAN

FIGURE 1

TECHNIQUES AND PROCEDURES

Analyze the Mission

The IO officer and his cell analyzes the mission to determine the military and political objectives and the commander's intent. The IO cell collects all available Relevant Information and Intelligence (RII) and begins to formulate the questions that he will need answered. If not already created, the G2 develops an IO Intelligence Preparation of the Battlefield.

The IO officer presents the work the IO cell completed to the IOWG. The other members of the IOWG are analyzing the mission to determine how they can best contribute to achieve the commander's objectives. Here in the IOWG, the IO officer serves as a facilitator. His task is to exploit the creativity, talent, and experience of all the members. It is a team effort. And, although following the IOWG meetings the members will go back to their individual work sites to plan and manage their activities, it is through the IOWG that the IO officer gains synergy by ensuring that IO is fully coordinated and synchronized. For the rest of the IO process, the reader can assume that the steps are carried out by the IOWG functioning as a team.

Seek RII

Relevant Information and Intelligence (RII) is the key to effective IO. It is needed to plan, implement, monitor, and evaluate. The G2 representative is the IO officer's link to RII. The IOWG develops Request for Intelligence (RFI), which the G2 representative works. He ensures RFIs are properly submitted, monitored, and answered, providing feedback to the IOWG. This does not mean the other members can sit back and wait for the "answers." They will be using their sources to collect RII. PSYOP, Civil Affairs (CA), CI, and SOCCE teams in the field will be collecting RII. The IO cell is aggressively exploiting the unclassified internet and the various military nets. The POLAD also has sources. The PAO will provide the IOWG with information on the media environment in which friendly forces are operating. Maintenance contact teams, logistic teams, engineers, reconnaissance elements, and Infantry and Military Police patrols are exploited for RII. The point is that the myriad of sources are fully exploited, and RII is shared within the IOWG.

Determine IO Objectives

An IO objective is a specific and operational statement regarding the desired accomplishments of the IO program. For each IO objective, the planner strives to use strong verbs, states only one purpose or aim, specifies a single end-product or result, and specifies the expected time for achievement.[2] It is important to remember that the closer the objectives are to outcomes that can be directly measured, the more likely it is that a competent evaluation will result. Using our scenario, the IO cell determines as an IO objective the following: *"Within 90 days, dissuade the populace of Tajmil from rioting."* Dissuade is the strong verb. The IOWG has the one aim of dissuading the populace from rioting, and the specified outcome is the lack of rioting. The outcome that can be easily measured. The populace either riots or they do not. This IO objective becomes the overarching objective for each of the IOWG members. They will develop objectives for their individual elements of C^2W and Public Affairs (PA) and Civil Affairs (CA).

Determine Objectives for Each Element

The IO Staff Officer needs to know what the objectives of the elements of C^2W and PA and CA are and how they will aid in achieving the overarching IO objectives. Although members will come to the IOWG with objectives already in mind, it is important to go through a brainstorming process. Brainstorming takes up valuable time, but is time well spent. It fosters team ownership of the objectives; it provides a sanity check; and it allows the members to know each other's intent, creating opportunities for synergy. Brainstorming will ensure that the IO and the elements' objectives are clear, distinct, and focused, and, more importantly, will assist the members in understanding the connectivity between the elements' objectives and the overarching IO objective.

Keeping with our scenario, one PSYOP objective might be: Inform the target audience of the ramifications of any rioting. If ramifications include military response, it is imperative that the military and diplomatic agencies are capable and have the resolve to follow through on the military actions. This example illustrates why PSYOP themes must be approved by higher. (The approval process should not be that cumbersome. The objectives and themes for PSYOP, deception, and the other pillars of C^2W will be rolled into the IO program, which can easily be shown to support the CINC's IO campaign plan.) One might argue that "inform" is not a strong verb, and, admittedly, "inform" is a long way from "dissuade," but to simply inform is a necessary step toward achieving the IO objective.

It can also be easily measured. The military deception objective might be: Convince the target audience that certain areas will be heavily patrolled and monitored by ground and air assets. **When in reality, the friendly assets are not available to conduct such operations as described.** Electronic Warfare (EW) might have the objective to *"Degrade and disrupt the capability of faction leaders to communicate electronically during a certain period of time."* **The time might be triggered by some event that indicates rioting is imminent**. It must be remembered that the purpose of these objectives is to achieve the IO objective. Achieving an individual element's objective and not achieving the IO objective is a failure for the IOWG.

---

[2] Peter H. Rossi and Howard E. Freeman, ***Evaluation*** (Beverly Hills: SAGE Publications, 1982), page 59.

Identify IO Targets

The IO cell identifies IO targets and presents this list to the IOWG for additions and deletions; other IOWG members will have targets that the IO cell did not have. Targets will, of course, be quite diversified. They could be key communicators, a certain segment of the population, or a set of radio towers that are being used to encourage people to riot. The probability of success is increased if a target can be attacked by more than one pillar of C^2W.

Obtain detailed information about the target audience.

As a minimum, RII about the target audience should consist of the following:

- **Political agendas**
- **Biographic information**
- **Decisionmaking processes**
- **Demographic information: age, sex, race, religion, economic income, cultural likes and dislikes.**
- **The target's perceptions of friendly capabilities and possible courses of action**
- **The target's IO capabilities and processes**
- **Estimates of target's actions under differing scenarios**

One area where work is needed is in the field of modeling and simulation for IO. The difficulty of quantifying results produced by IO activities has caused modeling for IO to lag behind the more conventional force-on-force modeling. However, work is being done with such modeling tools as the Advanced Regional Exploratory System (ARES), the Deployable Exercise Support System (DEXES), and SPECTRUM show promise. As these and other tools are developed, modeling will aid the IO staff officer in evaluating various courses of action and objectives and in estimating the target's actions under different scenarios.

PSYOP personnel are trained in target audience analysis—the process by which potential target audiences are identified and analyzed for effectiveness, accessibility, and susceptibility. This type of analysis prepares the IOWG for the next step—developing themes.

Develop Friendly Information Themes

FM 33-1, *Psychological Operations,* defines a theme as a subject, topic, or line of persuasion used to achieve a psychological objective. Themes to use and avoid will often be passed down from higher. However, that is not to say themes could not be developed at the Land Component level. PSYOP personnel have the skills, expertise, and experience to develop themes. But again, as with objectives, themes should be discussed within the IOWG for possible improvement and to ensure that all members are thoroughly familiar with them. In our scenario, possible themes are: *"Peaceful protests is the appropriate way to communicate your desire for political change." "Violence will be met with force in order to protect lives and property." "Rioting will delay and possibly stop the rebuilding of roads and homes and the inflow of economic aid."* It is important to remember that the themes are not necessarily PSYOP themes. Providing the right piece of information to the right audience with the purpose of reinforcing or creating perceptions or to cause ambiguity is the goal. However, thinking in terms of themes, allows the IOWG to develop, identify and create that "right piece" of information.

Identify Pressure Points

A pressure point is an important, essential, or primary factor that can be influenced to control behavior. As with objectives and themes, the IO officer should facilitate an IOWG discussion with the purpose of identifying pressure points and ways that they can best be exploited. In our scenario, the people of Tajmil desperately need economic aid. This aid is a pressure point. It will be made clear to the citizens of Tajmil that the delivery of aid will depend on whether or not the political leaders support democracy.

Develop Measures of Effectiveness (MOE)

Developing MOE for IO is, in my opinion, the most difficult step in the IO process. Without MOE, the IOWG will not be able to evaluate the effectiveness of the IO program. A commander has the right and the responsibility to ask his IO staff officer this simple question: *"How do we know this IO stuff is helping me achieve my overall objectives?"*

Thus, the IOWG needs to build MOE into the IO plan so that the following three critical metrics can be measured:

! *Effectiveness*. Describes the relationship between outputs and objectives. Were the IO objectives achieved? If not, why not?

! *Efficiency*. Describes the relationship of inputs and outputs. Although the IO program may have been effective, could there have been ways to accomplish it quicker and cheaper?

! *Adaptability*. Describes the ability of the IOWG to respond to changing demands. Was there sufficient flexibility to adjust a PSYOP program or deception plan to react to an unexpected event?

MOE can be classified as either quantitative or qualitative. Michael Patton in his book, ***Utilization-Focused Evaluation,*** states, *"Quantitative methodology assumes the necessity, desirability , and even the possibility of applying some underlying empirical standard to social phenomena. By way of contrast, qualitative methodology assumes that some phenomena are not amenable to numerical mediation."*[3]

Quantitative research is desirable when:

- ☛ **A picture of the environment at a given point in time is needed.**
- ☛ **Data that can be projected to a larger universe is needed.**
- ☛ **The target audience is difficult to reach.**
- ☛ **Large amount of specific information from the target audience is sought.**
- ☛ **The data must be statistically representative of a very large geographic *area.***

[3] Michael Quinnn Patton, ***Utilization-Focused Evaluation*** (Beverly Hills: SAGE Publications, 1978), pg 212.

Qualitative Research is desirable when:

- ☛ **Modifications need to be made in an idea before it is finalized.**
- ☛ **Very fast feedback from the targeted audience is needed.**
- ☛ **The research budget is limited.**
- ☛ **There is a need to probe deeply into the cause of some observed behavior.** [4]

The point here is that different kinds of assessments require different types of MOE. The IOWG should not get locked into thinking that if MOE are not quantifiable they are of no use.

Write the IO Plan

With the information obtained thus far, the IO cell is now ready to write the IO plan. The written document might be in the format of an IO Annex to a CONPLAN or OPLAN. In addition, the IO cell uses a series of worksheets, matrices, and gant charts to record and display objectives, pressure points, tasks, milestones, and timelines. [5]

Implement and Monitor the IO Campaign Plan

During this step, the plan is executed. The plan is monitored, and feedback begins to be collected. The collection of RII continues. A Synchronization Matrix is used to deconflict and synchronize IO activity. The members of the IOWG are constantly using RII, MOE, and feedback to evaluate the effectiveness of their individual activities, allowing them to fine-tune the plan and adjust to unexpected events. The focus is on coordinating, adapting, and achieving synergy. Figure 2 is a portion of a matrix that depicts how the components of IO are mutually supporting. Let me state emphatically that PA and CA do not conduct PSYOP or deception, nor are these components of IO manipulated by the PSYOP and deception planners. However, they and the elements of C^2W, by staying in their own lanes and providing information that create the desired perceptions, can achieve synergy, and, thus, increase the probability of achieving the IO objectives.

---

[5] Beavers and Shanahan used the following worksheets and matrices in their work in Bosnia:

! ***Pressure Point Identification Worksheet (PPIW).*** The PPIW provides the IO planner with a systematic way to identify ways to influence target audiences.

! ***IO Planning Worksheet (PW).*** The IO planner uses the PW to determine how and when to influence each pressure point.

! ***Synchronization Matrix (SM).*** The SM is used to deconflict and synchronize IO activity.

! ***IO Implementation Worksheet (IW).*** The IW is used to record additional information about each IO event found on the SM. In addition to identifying the attack "subsystem," the worksheet identifies the specific information themes that will be used for each IO audience.

! ***IO Implementation Matrix (IM).*** The IM chronologically lists all IO executions for each IO function. Information from the IM is carried forward to the optional IO Implementation Graphic.

! ***IO Implementation Graphic (IG).*** The IG graphically portrays scheduled IO activity during a specific time period.

	PSYOP	Deception	CA	PA
PSYOP can support by:		• Creating perceptions that will enhance believability of deception plan • Providing RII to IOWG	• Informing the populace on the benefits being provided by CA • Loud speaker teams helping control the populace during aid distribution • Explaining to populace why certain groups are not receiving their perceived "fair share" of aid	• Conducting counter-propaganda and protection from misinformation and disinformation • Produce articles by key communicators that encourage respect for democracy and rule of law
Deception can support by:	• Disseminating information that reinforces PSYOP themes • Creating perceptions that enhance susceptibility to PSYOP themes		• Reinforcing CA themes in the content of deception information	• Creating perceptions that support PA-desired perceptions
CA can support by:	• Providing aid to Host Nation, which gives substance to PSYOP themes • Providing RII	Providing RII to IOWG • Disseminating truthful information that reinforces believability of deception plan		• Providing events that PA can exploit that will show the command in a positive light
PA can support by:	• Providing information that counters adversary's propaganda • Providing interviews with commanders who articulate JTF's reaction to rioting	• Providing stories that show the unit is combat-ready and prepared to respond to riots	• Publicizing financial and humanitarian aid given to Host Nation • Providing information on how the populace is to receive aid, i.e., times and locations	

FIGURE 2

Evaluate the IO Program

As stated earlier, MOE are built into the plan. The purpose of some of these is to provide the IOWG with an azimuth check, enabling the IO planners to adapt their plans as necessary. MOE are also used to evaluate the overall effectiveness of the IO program. Knowing the effectiveness, the IOWG can decide whether to modify the existing IO program and continue, to continue without change, or to end it.

One more comment on MOE. Developing and implementing IO MOE must be a team effort by the IOWG. The PSYOP element's pretesting and post-testing of a product or evaluation of a PSYOP program needs to be shared with the IOWG. Other members could possibly use the feedback to evaluate their own efforts. This information is needed by the IO staff officer to evaluate the overall IO program. Also, resources can be saved if one evaluation could answer the questions needed by other members of the IOWG.

Conclusion

The challenges facing the IO staff officer are formidable. Getting the IO Working Group to function as a team, obtaining RII, and measuring IO effectiveness are just a few of the hurdles he must overcome. He needs additional tools to monitor and evaluate IO at the sophistication equal to his civilian counterparts in marketing and political campaigning. Thus, much work remains, but the IO process does provide the IO staff officer with a needed methodology to plan and implement Information Operations.✪

★★★★★★★★★★★★★★★★★★★★★★★★★★★

DEVELOPMENT OF A MEDIA VISIT ITINERARY

By MAJ James E. Hutton, Military Analyst, CALL

"Public relations is not difficult in wartime. We do not have to exert ourselves very much to climb upon the bandwagon of the great surges of public emotion that run through nations at war. The difficult time to gain favorable public opinion is now when the war is over."[1]

--Major Johan O. Ronningen, USA, Instructor, Command and Staff College, August 1946

★ Introduction ★

Although Major Ronningen underestimated the difficulty the military would face on the future battlefields of Korea and Vietnam, his central point remains valid today: In times which have no ongoing major war, the understanding of the need for a large and ready force among the public sometimes wanes. This is especially true in an era of perceived security.

From Major Ronningen's era to today, efforts to maintain a positive public affairs program present a challenge. Visits to our installations or deployed units can often result in the most positive and informative articles or broadcasts of any that appear in the media. PA planners must capitalize on such opportunities and leave nothing to chance.

The successful media visit normally has three parts for the PA planner**: 1.** ***Itinerary Planning*** which includes escort selection, event scheduling, and rehearsal, **2.** ***Pre-Visit Coordination*** which includes preparation of persons and places to be visited, prepackaging of media materials, and coordination with higher headquarters, and **3.** ***Visit Logistics*** which includes the planning for vehicles, food, equipment and documentary requirements. The plan must also incorporate an after-action review (AAR) to ensure all parties involved learn from the experience and that systems are continually improved.

[1] Johan O. Ronningen, Major, U.S. Army, "The Army Public Relations program," ***Military Review,*** August 1946, pg. 57.

★ Itinerary Planning ★

The itinerary provides the blueprint for the media visit. As the base document for the visit, the itinerary should have key components for all involved parties (see Figure 1): 1. Clearly list the media escort ***by name.*** 2. List ***by name all members*** of the visiting party. 3. List a ***point of contact from the visiting party*** and include his phone number. 4. Schedule the ***exact movements*** of the party by time. 5. Provide ***a description of media events*** coinciding with the movement schedule. 6. List by name the ***responsible party at each destination.*** (Although the media escort is always present, visited agencies are better equipped to ensure smooth movement in unit or agency areas).

The process for selecting an escort varies situationally. In combat areas or in special situations for contingency operations, the processing of media and authorization for movement in the zone of operations is normally stated in Annex F to the operations order. Selection of escorts will vary depending on the availability of public affairs officers, distance between units and headquarters, logistical support and commander's guidance.

In garrison or installation environments, normally the public affairs officer or media relations officer will serve as escort. The escort officer must understand the media's purpose and intent for visiting; he must know and have made contact with all parties to be visited, and have full access to logistical support. It is crucial that he knows any developed command messages and relevant questions and answers if any are available. Many reporters will ask him for clarification, definitions, and follow-on questions as new areas of interest occur. The escort officer can provide the critical service of **"getting it right."**

As with all operations, a **schedule of events** is central to a positive outcome. In creating the scheduling, ensure all stops on the visit are accurately timed. Do not create excess time for each stop as a "buffer." It is generally better to run out of time than to have too much time on any one interview. It is up to the PAO and the commander to ensure our command messages are clearly articulated within reasonable time constraints; it is also worth understanding that many of the individuals scheduled for interviews have full schedules --- PAOs must ensure such individuals' time is scheduled appropriately.

Rehearse the schedule by driving routes, checking the dismount-to-interview times, and briefing personnel to be interviewed. Rehearsals are critical to the success of the visit. Ensure operational success by holding to the schedule --- inform the interviewees well in advance of time limits.

OFFICE SYMBOL

300752DEC96
CPT Core/3073
ESCORT: MAJ Miller

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Visit by *American United Review* Newspaper

1. On 11 Jan 97, reporters from the *American United Review* will visit Fort Davis to receive briefings and observe training. Members are:

John Smith, Senior Reporter, *American United Review*
Jay Johnson, Military Editor, *American United Review*
James Dehart, Staff Photographer, *American United Review*

GROUP POINT OF CONTACT IS: MR. JOHN SMITH, (760) 555-XXXX.

2. Party consists of 3 visitors total.

3. The following itinerary information is provided:

DATE/TIME	EVENT	RESPONSIBILITY
SAT, 11 JAN 97:		
1030	Party arrives at Visitors' Center Greeted by CPT Core	
1030-1045	Enroute to Operations Center	CPT Core
1045-1215	Command Brief w/MAJ Miller	MAJ Miller
1215-1240	Tour of Operations Center	SFC Mullins
1240-1245	Enroute to Leader's Club	MAJ Miller
1245-1330	Lunch at Leader's Club	MAJ Miller
1330-1400	Windshield Tour	MAJ Miller
1400-1415	Enroute to Museum	MAJ Miller
1415-1515	Tour of Museum	Mr. Gruber
1515-1520	Enroute (walking) to HQ Opns Division	MAJ Miller
1520-1600	Operational Briefing	MAJ(P) Dillon
1600-1610	Enroute to C Company	MAJ Miller
1610-1720	Tour C Company	CPT Perry
1720-1730	Depart from C Company	CPT Perry

ARTHUR L. MILLER Jr.
MAJ, IN
Public Affairs Officer

LEGEND
1 - Escort Officer Name
2 - Visiting Party
3 - Group Point of Contact
4 - Schedule
5 - Event Listing
6 - Responsible Person or Agency

FIGURE 1. Itinerary Example

★ Pre-Visit Coordination ★

Before scheduled media visits, either to installations or other areas under military control, the PA planner must coordinate the events. Persons to be interviewed must be briefed on the schedule, given the command messages, and rehearsed (if possible) with questions and answers. Many persons will be in front of the media for the first time; attempt to replicate expected conditions in the rehearsal and eliminate as much mystery as possible.

Prepare media packages tailored to the type of visiting media. Appropriate items include unit histories, one-page biographies of interviewees (usually only in the case of brigade-level commanders and other key staff officers or higher), and a list of frequently asked questions (FAQ). For electronic media, provide high-quality tapes or films depicting the activities of the unit or installation --- the higher the tape quality (especially in Beta format) the more likely it will be used.

Coordinate the visit with higher headquarters. Although regulatory guidance provides for clearance of visits by local commanders, it is often prudent to contact higher headquarters and provide a plan of events. It is also important to provide backbriefs to higher headquarters following media visits. Provide a list of types of questions asked, answers given, and expected outcomes. Use the "reasonable man rule" in deciding which events to detail to higher headquarters (i.e., if a local reporter is coming to interview the coach of the post softball team following a city championship, it is probably not vital to advise higher).

★ Visit Logistics ★

Visits by media often require logistical planning. Often media come to an installation or deployed area with the intent to be with a unit for several hours (or sometimes days). The planner must consider the elements required to maintain support for the visit. ***Vehicle support*** is often difficult --- vehicle use on installations and in deployed areas is always at a premium. Prepare the vehicles considering the following factors: the number of passengers, fuel requirements, driver licensing, and added requirements (such as requirements to wear Kevlar helmets or eye protection).

Food and water are also considerations. If reporters are deployed in field locations with units, the units can often provide food. However, it is important to check regulatory and policy guidance for reimbursement requirements, if any apply. Provide water on a continual basis. On short or one-day visits, it is often possible to coordinate with the visiting media and suggest the visitors bring their own food (within specified limits clearly determined in advance).

Other equipment needs are also important to consider. In some instances, special clothing, helmets, eye-protection, sleeping bags, protective masks, or other items are needed and must be issued. Ensure accurate records are kept and require the visitor(s) (especially if larger groups are involved) to sign for borrowed items. **Maintain property accountability**.

Require each visitor to **sign a hold harmless waiver** (see Figure 2) and **complete other documents** in accordance with local or organizational policies. Inform the reporters in advance of potential dangers and of your emergency plan. Require the reporters to wear allergy tags and provide any important medical information.

HOLD HARMLESS/RELEASE FROM LIABILITY STATEMENT

1. I recognize that covering combat and other military operations carries with it certain inherent risks to life, limb and equipment.

2. I acknowledge that the U.S. military, in pursuing the successful accomplishment of its mission, cannot guarantee my personal safety or the safety of my equipment.

3. I hereby release the U.S. government and the U.S. military of any liability from, and hold them harmless for, any injuries I may suffer, or any equipment that may be damaged as a result of my covering combat or any other military operations.

4. I understand that my agreement to this statement is a condition of being credentialed to cover U.S. military operations and receiving assistance for that coverage.

SIGNATURE DATE

PRINTED NAME, AFFILIATION, ADDRESS & PHONE NUMBER

WITNESS SIGNATURE

WITNESS PRINTED NAME, RANK AND ORGANIZATION

FIGURE 2. Hold Harmless/Release from Liability Statement

Finally, if any of the reporters or photographers (and any other crew members) are **foreign nationals,** a clearance to visit must be gained from the Foreign Press Center. Route media requests from foreign nationals through your higher headquarters to the Foreign Press Center and ensure visit approval before allowing the visit.

★ Conclusion ★

Capitalizing on media encounters is especially important when commanders and PAOs are fully cognizant of the visit in advance. Nothing can be left to chance, and all parts of the plan must be known to all parties involved. Through rigorous itinerary planning, pre-visit coordination, and planning for logistical needs, the PA planner can greatly enhance the prospects for a meaningful media encounter. Our role in informing the public is paramount for successful operations at home and abroad --- plan well and think through each encounter. The nation and the world are watching.✪

DIGITAL TECHNOLOGY, ENGINEERS and PEACEKEEPING

by MAJ Frank Akins, MAJ Robin Hagerty and James Mason

Under the scenario of engineer operations other than war, UN forces journeyed to Bosnia to facilitate peacekeeping operations. Elements of the 1st Armor Division (1AD) established Task Force Eagle to provide an operational framework to support these efforts. Bosnia presented many unique challenges which significantly influenced operations which were far beyond the mere peacekeeping role. Mines are one of the most significant disruptions to peaceful movement. Routes through Bosnia were severed, primarily through the destruction of bridges and random mining. ***"Estimates place the number of mines in Bosnia between 3 and 6 million."***[1] Mine emplacement efforts have a twofold purpose of controlling civilian movement and restricting sustainment convoys. The topography in Bosnia is ideal for this weapon as a cheap, effective alternative to large concentrations of dug in troops. ***"Mountainous Bosnia is a cross between Germany's Hurtgen Forest and Vietnam's central highlands. The terrain is steep and heavily timbered, and the ground is strewn with literally millions of uncharted mines and booby traps."***[2]

Peacekeeping forces established a barrier between the warring factions, allowing the opening of the road networks for convoy operations. A critical component of opening the road network is the discovery, tabulation, and mapping of mine locations. Task Force Eagle was faced with a multifaceted problem consisting of locating and tracking the mines, plus noting and verifying any discovered "safety zones" or established mobility corridors through the belts. The minefields and existing safety zones discovered can be best visualized through graphical mine overlays.

Initially, a mine reporting and data collection section was established in Tuzla. Task Force Eagle relied on manual reporting efforts to tabulate and track mines. The 1AD Engineer Brigade's challenge included custodian of the battlefield, developer of mine data, and distributor of mine information.[3] Combat engineers plotted over 6,000 minefield locations by hand, causing accuracy questions. Black and white maps were produced from these overlays using the United Kingdom "Taciprint." The UK Taciprint is a truck-mounted printing press. It is a rugged system designed for field use. The E-OPS System augmented the Taciprint with an electronic plotting capability. There are modern systems available, but are not field proven. The newer systems are more delicate and require a controlled and stable environment. However, the newer systems provide the ability for rapid changes and dissemination of collected data. Nonetheless, a void was identified in the ability to develop, maintain and disseminate mine information.[4]

---

[1] Fedarko, Kevin, "Land Mines: Cheap, Deadly and Cruel," ***Time***, May 13, 1996, Volume 147, No. 20, page 54.

[2] "Gearing Up for Peace," ***Newsweek***, December 4, 1995, page 33.

[3] Taylor, Edward B., Major, "Building a Minefield Database System," ***Engineer,*** December 1996, PB5-96-4.

[4] Ibid.

Automated technology was needed to accelerate and expand this effort. Past experimentation verified the effectiveness of digital technologies in increasing planning capabilities and reducing the data processing "turn-around" time. Delays in processing and disseminating mine locations could result in unnecessary casualties. New technology was evaluated by Task Force Eagle in an effort to answer some of the past shortfalls of accuracy, processing times, and dissemination of mine data to all affected units.

At the request of the USAEUR DCS Engineer, Waterways Experiment Station (WES) provided a prototype version of the Engineer Operations (E-OPS) software with hardware and an operator to assist engineer operations managed through Task Force Eagle. WES is developing E-OPS to provide the engineer with a digital planning tool in support of mobility, countermobility, and survivability missions. E-OPS previously participated at Ft. Leavenworth, KS, during Prairie Warrior (PW) 1995, 1996, and 1997, as part of the Mobile Strike Force and just participated with ExForce engineers at Fort Hood, TX. Participation is targeted at sharpening the software obstacle planning and tracking potential. The developmental framework provided the basis for the enhancement capability including the mine tracking, plotting, and data input.

The principal missions of the WES personnel and equipment in Bosnia were to support the tracking and tabulation of discovered mines. Once processed, the mine locations could be displayed as overlays at various map scales. To facilitate technology transfer, split-based operations methodology was used connecting WES technical personnel with the operator as he relocated from Heidelberg, Germany, to Taszar, Hungary, then to Tuzla, Bosnia. This arrangement allowed the different technical expertise at WES to be quickly applied to solve multiple issues. When originally deployed, WES expected additional enhancements would be required to meet specific user needs such as: importing existing spreadsheets or data bases of known mine locations, customizing output format, and menu-driven directions to lead the user through the minefield plotting process.

The E-OPS helped to fill the gap in the mine overlay production with its ability to produce a colored overlay of the exact mine locations. Mine locations were entered into a spreadsheet by combat engineers as they were found. The files were transferred to E-OPS, who placed them geographically in the data base and displayed them on a map background. Over 6,000 minefields were plotted in minutes instead of weeks with less chance of plotting error. The overlay was used to check hand-plotted minefield locations for validation. Furthermore, the overlay or the digital data can be sent to map production facilities elsewhere to mass-produce an improved colored product.

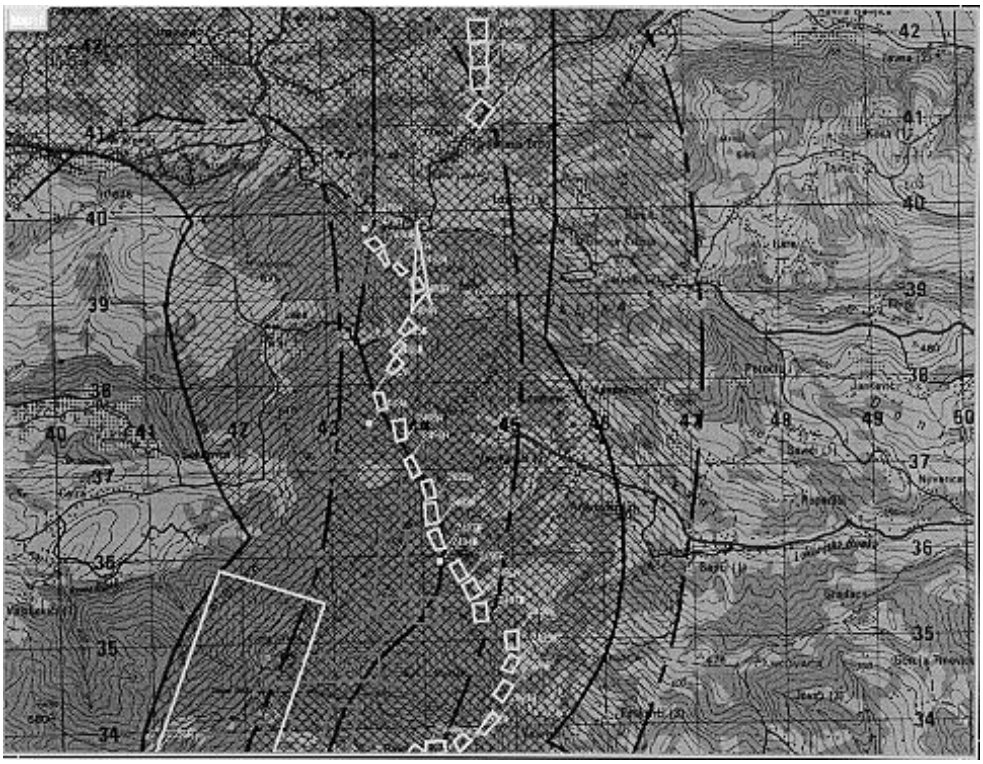


Figure 1. Graphic of E-OPS Mine-Plotting Capability.

The E-OPS prototype features a unique client-server relationship with the Terrain Evaluation Module (TEM). The TEM provides digital elevation and terrain data and background maps for development of the desired terrain analysis. TEM passes the elevation and terrain data to E-OPS, while E-OPS has the capability to support the engineers' tabulation of known obstacles by type, quantity, and disposition.

The E-OPS software can plot known mines with one grid coordinate or minefields with four corner coordinates. The primary product used in Bosnia was a graphic overlay produced at various scales. The software can also display or plot graphics with or without a minefield designator number in different colors for each mine type and designate breached minefields. When combined with a paper map, minefield boundaries can be viewed, providing a greater degree of accuracy to those agencies transiting through the areas.

The E-OPS software filled a void in minefield tracking and plotting capability in Bosnia and was the only minefield tracking and plotting system on the ground in the maneuver box. The lessons learned in minefield tracking and plotting in Bosnia will not be forgotten. The experience will lead to improvement upon the existing software. ***"We are on the threshold of a new era that might be termed the post-industrial period. Today, warfare is dependent more on the microprocessor, than the steel mill."***[5] The E-OPS presents an initial step toward leveraging the terrain and countering the slow, labor-intensive, and time-consuming task of tabulating and tracking discovered mines. Technology will continue to make a difference in both peace and war, with engineers mastering the terrain. For further information, contact Major Frank Akins at DSN 552-3035/2255 or Coml: 913-684-3035/2255, E-mail: <akinsf@leav-emh1.army.mil>.✪

[5] Sullivan, Gordon R., General, "Moving into the 21st Century: America's Army and Modernization," ***Military Review,*** July, 1993.

BATTLES FROM CORTINA

The following two articles, "Reducing the Cost of Reducing Obstacles," and "I Could Have Been A Contender," comprise *Battles from Cortina* and should be studied together.

Reducing the Cost of Reducing Obstacles

by MAJ Douglas L. Flohr and CPT Joseph S. McLamb

The first step in the brigade's plan of attack was the reduction of the simple obstacle on the primary road leading into the objective area. The obstacle, consisting of two rows of concertina wire, two small anti-tank minefields, and a handful of scattered anti-personnel mines, represented a relatively small threat to the brigade's overall operation. However, leaving the obstacle in its place would greatly hamper the brigade's mounted movement toward the objective and would make future casualty evacuation a difficult proposition.

The brigade tasked the lead battalion with reducing the obstacle, and the battalion passed the mission on to a company team consisting of a tank platoon, a light infantry platoon, and an engineer squad. The tanks moved forward and identified the obstacle, then provided overwatch as the engineers moved forward to establish a breach with the infantry providing close support. Ten minutes into the operation, not a shot had been fired, and the enemy appeared to have abandoned the obstacle in the face of the potential fire power of the tank platoon. The operation had the makings of a cakewalk.

However, there are few cakewalks in Cortina. Just 200 meters from the obstacle lay a two-man Peoples Democratic Republic of Atlantica (PDRA) team, unable to see the breaching operation through the steady rain. After listening to the sounds of tanks arriving and infantry dismounting trucks, the team called for mortar and artillery fire on pre-registered targets at the obstacle. Minutes later, the friendly infantry and engineers at the obstacle found themselves in the middle of the first of several indirect fire missions. Caught in the open on the road, the engineer squad was destroyed within 10 minutes, while the infantry platoon suffered a total of 27 casualties before they were able to move out of the impact area. By the time the road was open for traffic, the company team had been reduced to an effective strength of one tank platoon.

This episode,which is not uncommon in Cortina, offers two lessons for anyone tasked with reducing obstacles. The ***primary lesson*** is that the first step in the breaching process - **suppress** - means much more than preventing the enemy from placing direct fire on the breaching element. An enemy element too small to go toe to toe with a breaching unit may well choose to remain hidden, calling in indirect fires from a safe position. This means the friendly dismounted infantry's rightful place of duty is not in the vicinity of the obstacle, but out from the obstacle at locations that could harbor enemy observation teams. In the scenario discussed above, the tank platoon clearly possessed enough fire power to suppress any enemy unit that attempted to place direct fire on the breaching element. Placing the infantry platoon in close proximity to the obstacle gained nothing. A more beneficial use of the infantry would have been to send them around the obstacle to eliminate enemy observation teams on the far side.

The ***second lesson*** is that breaching operations must be in practice what they are in theory - **battle drills.** The conditions necessary for a successful breach are difficult to attain and even more difficult to sustain. A window of opportunity of more than a few minutes is rare. The breaching element must be rehearsed to the point that it can use the window, however fleeting, to good effect. Whether an opportunity to conduct a breach comes from a well-executed suppression and obscuration plan or a fortunate spell of bad weather, the breach element must be quick.

Breaching operations in Cortina are dangerous affairs. But units that suppress all enemy elements that can influence the operation, then conduct a rapid breach before enemy units can recover, have the best chance of keeping the costs of operations at a reasonable level.✪

"I Could Have Been A Contender!"

by LTC Andrew B. Twomey, MAJ Douglas L. Flohr,
and CPT Joseph S. McLamb, JRTC

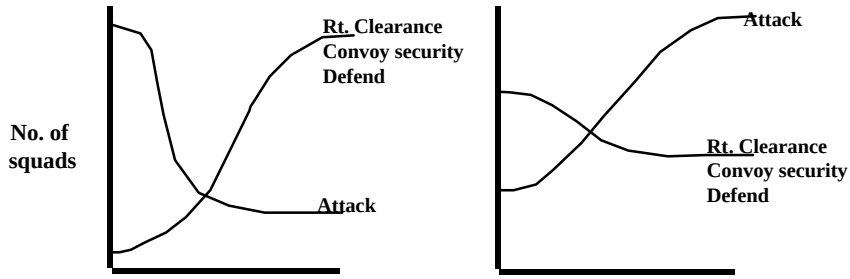
The battalion's initial ground movement into its operational area went smoothly. During the planning phase, the battalion S-2 and engineer effectively templated all enemy minefields located along the designated entry routes. The S-3 developed a plan to clear the obstacles, and the companies executed the plan with minimal losses. Clearly a success story all around, and yet, over the next three days, the battalion would incur a total of 59 casualties, and lose seven vehicles in these same minefields. Forced to divert precious combat power from the battlefield to secure its lines of communication, the battalion effectively limited its ability to conduct search-and-attack operations. Companies that should have been hunting an elusive enemy found themselves hog-tied to a road network in a desperate effort to keep the battalion's lines of communication open.

Lack of a sustained route clearance plan hampered the battalion's ability to rapidly exploit opportunities and quickly project combat power. Although rear operations only constitute one fifth of the offensive framework, small disturbances in the maintenance of the lines can significantly disrupt a battalion's momentum. During search-and-attack operations, a battalion has to act like a boxer entering into the ring for a 15-round bout, and he has to prepare himself to go the distance. A skilled boxer knows that he has to jab and move to deliver his blows, but to defeat his opponent he also has to maintain his guard. In Cortina, if a battalion wants to keep its guard up, it better ensure that its lines of communication remain open and secure.

A technique to accomplish this is to use maneuver units on the first day of the search and attack to deliberately clear what will subsequently become the battalion "rear." This does not mean that the area can be secured once and for all -- the TOC, the combat trains, the mortar platoon and other elements in the "rear" must continue to maintain local security. But a deliberate initial effort to clear (not just reduce) enemy minefields, to find and destroy the observers and caches supporting those minefields, and to systematically drive the enemy away from his high value targets pays off. Because the enemy's mine caches are gone, minefields emplaced on subsequent days are hasty, small and easily cleared by a small element (an AT platoon with attached engineer squad for example) dedicated to sustained, routine route clearance. Because the enemy forces have been forced out of hide sites close to high-value targets, the enemy now has difficulty adjusting indirect fire on these same targets. The enemy now has to maneuver some distance to attack the high-value targets' HVTs. Friendly forces now have a much greater chance of detecting and defeating the enemy through routine patrolling of the rear. The payoff to fighting for and winning the rear area battle early permits fewer maneuver forces on subsequent days of the operation to secure potentially vulnerable nodes.

Failure to destroy the enemy in the rear early invariably results in the diversion of infantry to "force protection" later in the operation -- unfortunately at precisely the moment when we should be delivering the knockout blow. The puzzle of force protection in the search and attack cannot be solved through the allocation of squads and platoons across the battlefield to secure every potentially vulnerable node. You do not win the boxing match on the defense. But quick jabs early on to back the enemy away, followed by continued aggressive maneuver, combined with a sound plan for sustaining interior lines, permits the battalion to achieve offensive momentum and denies the enemy the ability to maneuver against high-value targets. The battalion that does not establish the rear of the battlefield framework early is like a boxer who has dropped his guard. The battalion is vulnerable to jabs, and unable to put together a combination of punches to drive the enemy to the mat. And in Cortina, if you can't deliver the knockout blow...you'll probably receive it! (See graphic on the following page.)✪

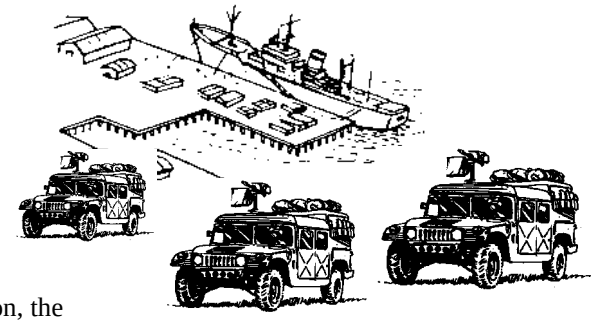
Infantry Squad Tasks vs Time
During Battalion Search and Attack



Wrong **Right**

Preparing a Unit for Barge Loading - *One Battalion's Experience*

By MAJ James E. Hutton, Military Analyst, CALL



INTRODUCTION

The field artillery battalion discussed in this article had its orders: move its entire fleet of tracked and wheeled vehicles to a river port in Germany for barge loading. The vehicles were later loaded onto ships at an ocean port for shipment to the United States.

This article focuses on the preparation and movement of the equipment to the barge site. Although factors, such as local traffic laws, environmental regulation, and theater policy will affect any such operation, the preparation procedures discussed here may prove valuable for any unit faced with similar circumstances.

To review the operation, the first section is an examination of the battalion's mission and the commander's intent for conduct of the operation. That is followed by a look at the battalion's unit and staff tasks required to prepare and execute the mission. The next section retraces the phases of the operation that ultimately led to mission accomplishment. The final section provides insights and lessons learned both during and after the operation.

Battalions, and other units may be instructed to move soldiers and equipment by numerous means. By using good sense, thorough planning processes, and by taking logical and timely steps toward mission accomplishment, movement operations will prove successful.

MISSION AND INTENT

The battalion's mission to move the equipment was in conjunction with its larger mission to restation the unit from Germany to the United States. No equipment was being turned-in --- the unit would later pick up the equipment at a U.S. port.

The mission statement for the barge loading operation was simple:

> ***"(The battalion) moves all rolling stock to the...barge site from 30 May - 1 Jun..and loads the stock on barges for shipment to port. Battalion personnel will drive wheeled vehicles and heavy equipment transporters (HETs) will transport tracks to the barge site."***

To complete the mission, the commander intended to ensure all vehicles were operationally ready, could pass the requisite environmental tests, and that loading operations were coordinated. The purpose was clear: vehicles had to leave port within the three-day loading period --- follow-on shipments were not authorized.

Units in the battalion were organized into various teams, commanded by a battery commander. Primary responsibility for the barge-loading operation rested with the commander for the equipment team, the C Battery commander, with each of the other battery commanders providing support. The method to complete the required tasks was to create a phased execution of the steps leading to mission accomplishment. Each phase had an inspection component.

Accomplishment of the mission was defined as, ***"(the) safe movement to the barge site preceded by a detailed security and safety inspection,"*** followed by successful barge loading of all tracked and wheeled vehicles in the battalion fleet and cleaning of the sterile areas (defined below).

UNIT TASKS

Each of the batteries was able to provide some common elements toward the effort. Battery commanders were responsible for conducting pre-movement inspections and certifying readiness. Drivers and assistant drivers were listed by name, by vehicle, to ensure precise adherence to the movement schedule. Mechanics were pooled under the supervision of the battalion maintenance technician (BMT) and were strategically placed to assure a quick response to vehicle problems. Finally, an equal number of personnel from each battery were named to provide barge-site guard duty and cleanup.

Beyond the commonly provided elements, the batteries were assigned separate specific tasks for the operation:

- **A Battery.**
  - **Provide a 66-passenger bus driver and bus noncommissioned officer-in-charge (NCOIC)** for each day of the operation. The purpose of the bus was to pick up drivers from the barge site and shuttle them back to the *kaserne*.
  - **Provide four-wheel drivers for each day of operation to move vehicles inside the barge site**. Vehicles inside the barge site were under the operational control of the terminal officials. The drivers were given instruction on movement techniques and procedures.

O B Battery.

P **Provide two road guards for each day of the operation**. Movement along the German roadway to the barge site was monitored closely, not only by the leadership of the battalion, but by local officials. It was imperative to ensure the movement was conducted in a safe manner, causing as little disruption to the normal traffic flow as possible.

P **Provide an NCO to serve as NCOIC for the sterile area cleanup operation** 1 Jun. The sterile area was the section of a motor pool used to store vehicles that had passed all inspections and were awaiting movement to the barge site. The command sergeant major (CSM) conducted the inspection of the sterile areas following cleanup.

O C Battery.

P **Provide three track drivers for each day of the operation**. Because of special licensing procedures, only experienced drivers participated in moving tracked vehicles.

P **Provide at least one NCO to control base operations.** The battalion communications center served as a clearing house for operational movements, with NCOs controlling the activities.

P **In coordination with the base operations NCOIC, provide one NCO in each sterile area** to control movement in and out. To ensure safety and timely movement, strict controls were put on the movement of personnel in the sterile areas. The NCO prepared the movement serials and conducted final inspections of drivers and assistant drivers.

O HHS Battery.

P **Provide two medical personnel at the barge site for the duration of the operation**. The medics, led by the battalion physician's assistant (PA), were fully equipped for emergencies on the site. Each medic also rehearsed movement to area medical facilities and maintained military and strip maps to each facility. Additionally, the medics were equipped with communications for emergency notification. The PA coordinated for the use of an ambulance for the duration of the operation from another battalion in the brigade.

P In coordination with the physician's assistant (PA), **develop and distribute a medical evacuation plan** from the following locations: barge site, sterile areas, road guard location. The evacuation plans were distributed to each location NCOIC.

P **Provide communications equipment** to the battalion signal officer.

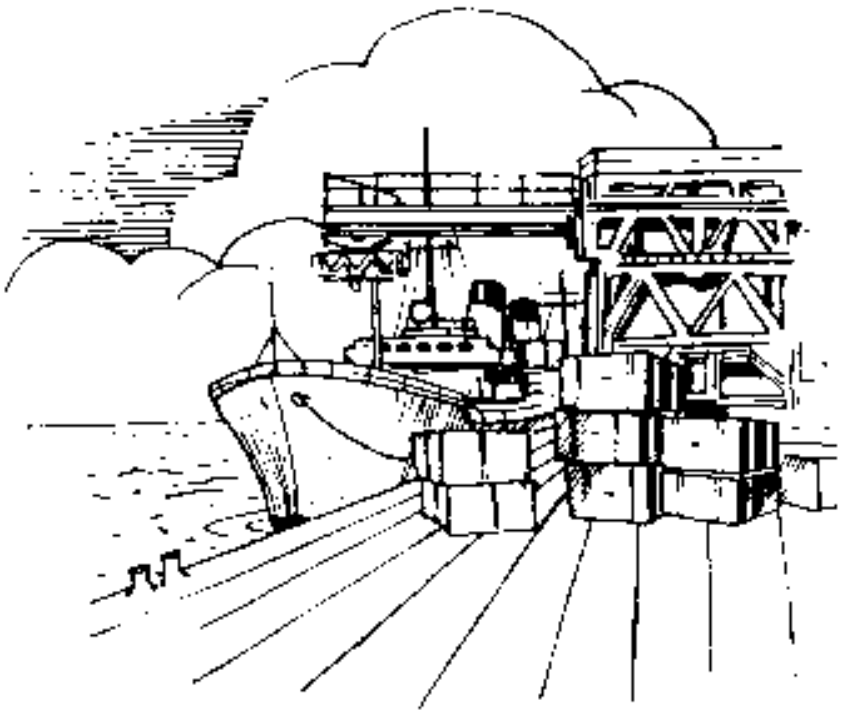
STAFF TASKS

Planning of the operation required intense staff supervision. The staff sections were each responsible for providing direction and procedures. Execution of the plan required key staff participation.

- **The intelligence officer (S-2)** created a security plan (discussed in Phases of the Operation below). He also coordinated with MPs for movement safety planning.
- **The operations officer (S-3)** provided a variety of planning and supervisory functions (in addition to formulation of the overall plan):
  - **Movement NCOIC.** The movement NCOIC worked closely with barge site and ocean port officials. He became the resident "expert" on movement procedures and requirements.
  - **Safety planning.** Every aspect of the plan was examined for risk assessment.
  - **Coordinate use of specialized equipment.** Some equipment, such as barge-site hard hats, were not organic to the battalion. This required the short-term use of equipment from a variety of sources.
  - **Coordination of vehicle use.** Because ALL vehicles were scheduled for barge loading, wide use of rental and military vehicles was required.
- **The BMT** coordinated for wrecker support and tool use.
- **The battalion signal officer** coordinated the use of additional communications means (such as Motorola radios).

PHASES OF THE OPERATION

Five phases of the operation led from the planning stage to final barge loading. Actual barge loading was preceded by key milestones for the event (see the following page):



KEY DATES

EVENT	*DATE(S)/TIMES*
Wheel Drivers/AD List Turnin	**18 May , 1200**
Escort Veh Drivers/AD List Turnin	**18 May , 1200**
S-2 Security Plan to S-3	**18 May , 1200**
A Battery 66-Passenger Bus Driver Name to S-3	**18 May , 1200**
A Battery Wheel Drivers for Barge Site List to S-3	**18 May , 1200**
B Battery Road Guard Plan to Battalion Opns Sgt	**18 May , 1200**
B Battery Sterile Area Cleanup Plan to CSM	**18 May , 1200**
C Battery Track Driver List to S-3	**18 May , 1200**
HHS Battery Medical Evacuation Plan to S-3	**18 May , 1200**
HHS Battery Motorolas to Signal Officer	**18 May , 1200**
Dining Facility Manager Meal Plan to CSM	**18 May , 1200**
HHS/A/B Battery Guard Force Names to S-3	**18 May , 1200**
Route Briefing for All Drivers/AD	**23 May , 1200**
Communication Vehicle Pickup	**25 May**
M88 Spot and Load	**26 May , 0630**
Barge Loading	**30 May - 1 Jun /0700-1600 Daily**
Mermiting of Meals	**30 May - 1 Jun**
SIGO Distribution of Frequency Cut Sheets	**30 May , 0600**
M577 Spot and Load	**30 May , 0930**
M270 (MLRS Launcher) Spot and Load	**30 May , 1230**
Heavy Expanded Mobility Tactical Trucks (HEMTTs) Stage	**30 May , 0600**
HEMTT Tanker and Wrecker Staging	**30 May , 0600**
HMMWV Staging	**30 May , 0600**

Security was the first phase of the operation. The focus during this phase (which actually extended throughout the operation) was on movement routes and security measures at the barge site, including during the nights of 30 and 31 May. (Work hours for loading were restricted due to civilian worktime limitations.)

The battalion S-2 and MPs conducted daily route reconnaissance between the *kaserne* and the barge site. Upon arrival at the barge site, the S-2 and MPs conducted a security sweep of the area and designated parking lot. The S-2 also made nightly checks of guards posted in the sterile areas and the barge site.

Prior to initial vehicle movement, the battalion equipment team opened the sterile area gates with the guards performing enter/exit traffic control and checking the identification (ID) card of individuals entering on foot.

Ten guards were on duty at the barge site on a continual basis for the entire operation. Each guard was equipped with an ax handle. The S-2 briefed the entire guard force on restrictions concerning use of deadly force.

The guard force was drawn equally from HHS Battery, A Battery, and B Battery. C Battery was exempt because of its commitment as the battalion equipment team. The uniform for the guards was battle dress uniform (BDU), Kevelar, flashlight, hand-held radio, and, as previously mentioned, ax handle. Each guard shift was for 12 hours and consisted of four guards in the rank of specialist or below, and one sergeant-of-the-guard in the rank of sergeant or above.

Vehicle **pre-inspection and staging** comprised the second phase of the operation. Prior to the preparation for movement, the vehicles were cleaned to meet very exacting environmental standards. Once approved, the vehicles were moved to a sterile area. Before movement out of the sterile area, drivers and assistant drivers conducted the following simple checks:

PRE-INSPECTION CHECKLIST

All before operation checks IAW equipment's -10.
Engine Oil Level.
Coolant Level.
Tire Pressure.
All vehicle lights.

Staging of vehicles for movement to the barge site was split into two parts: tracked vehicles, and wheeled vehicles. Tracks were moved by heavy equipment transporters (HETs). The battalion's tracked vehicles included M88 recovery vehicles, M577 command post vehicles, and M270 Multiple Launch Rocket System (MLRS) launchers. Spotting and loading of the tracked vehicles met the following schedule:

- **M88s.** Spot and load 26 May at 0630. (Note: Loading date indicates the date it was loaded on the HET. Barge-site operations began on 30 May.)
- **M577s.** Spot and load. 30 May at 0930.
- **M270s.** Spot and load. 30 May at 1230.

Wheels were sent as space became available from 30 May to 1 Jun using a call forward system. The wheels were sent in the following order: HMMWVs (all models), HEMTTs (M985) with heavy expanded mobility ammunition trailers (HEMATs), HEMTT fuel tankers, and HEMTT wreckers.

Using the call forward system, the barge site officials notified the battalion NCOIC of the type and quantity of vehicles to be brought forward from the *kaserne* to the barge site. The battalion movement NCOIC notified base operations of the movement specifications and issued a serial start point (SP) time, a minimum of one hour in advance of movement. Base operations notified the sterile area NCOIC who, in turn, selected an appropriate serial, designated a serial NCOIC, and staged the vehicles. He reported SP to base operation.

Movement to the barge site proceeded on each day of the operation between 0700 and 1600 daily. The initial movement consisted of three serials of 20 vehicles. Follow-on serials were tailored and sent using the call forward system described previously.

The initial push began on 30 May. The battalion movement NCOIC was positioned at the barge site. When called, HMMWVs moved from the *kaserne* along the designated route (Route Purple - Figure 1). HEMTTs moved along Route Green (also Figure 1), as instructed.

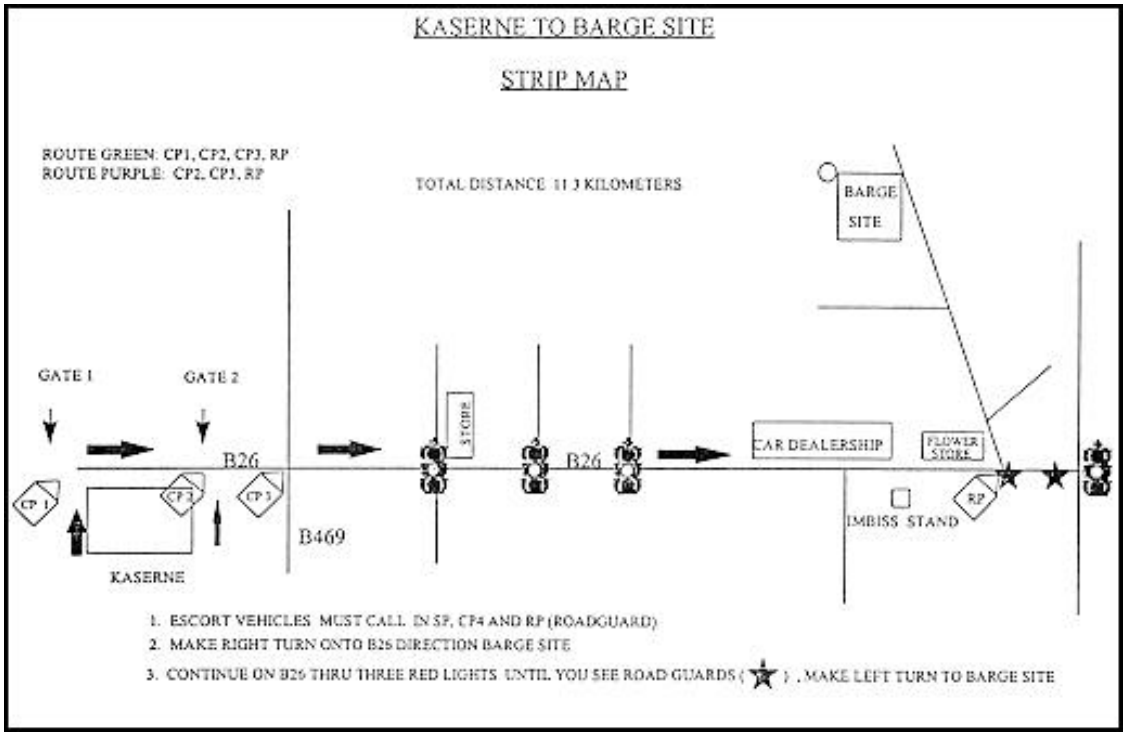


Figure 1. Strip Map to Barge Site

Following a safety briefing, each serial was led by an escort HMMWV (borrowed from another battalion) which was equipped with a radio and rotating amber warning lights (RAWLs). The SP, checkpoints, and release point (RP) were called in to base operations from the escort HMMWV.

Barge-loading operations, phase four of the operation, were primarily a function of staging vehicles inside the barge site according to instructions of the barge site officials, driving the vehicles onto the barge, and performing tie-down measures. The battalion movement NCOIC, controlled movement into the barge site through the use of the guard force.

The fifth and final phase of the operation was the **close-out of the sterile areas**. Barriers and other temporary materials were taken down and each of the sterile areas were quickly returned to their original state. The sites were inspected by the CSM and the battalion commander. With the final loading of vehicles and cleaning of the sterile areas, the operation was complete.

INSIGHTS AND LESSONS LEARNED

The battalion was fully aware early in the process that moving equipment to port for overseas shipment would require outside expertise. Other than the battalion movement NCOIC, who was both fluent in the local language and had prepared equipment for shipment before, few members of the battalion had direct experience in the required processes. Consequently, the battalion commander and his staff made good use of a written after-action review (AAR) of a similar operation from the archives of another unit. It is imperative that units faced with a similar move conduct a search of possible informational resources. Some resources include:

- **The Center for Army Lessons Learned (CALL) data base** at the following internet site: **http://call.army.mil/call.html** or contact CALL via email at **call@leav-emh1.army.mil**. Analysts from the center can assist your search.
- **Seeking out individuals within your battalion who have "been there, done that."** A surprising variety of experiences are available.
- **Contacting sister services in your theater.** Their perspective in transporting equipment will quite possibly yield avenues of thought your unit had not considered.
- **Conducting frequent in-progress reviews (IPR).** As the knowledge base for the operation grows, the cross-sharing of information begins to bear useful and timely information. There are a lot of smart soldiers in our units.
- **Centralizing your base planning documents.** Because an operation of this type is likely a rare occurrence, the subordinate commanders will likely become additional planners. This battalion organized specialized teams for different aspects of the plan. The teams produced written guidance and procedures which were given a cataloged tag number, a copy was put in the central document file, and distribution was made. On a regular basis, the units received a summary of all new guidance documents to ensure compliance.

Of course the operation produced lessons learned. Although the plan generally followed its initial design, the following insights were gained:

- **Close, continuous coordination with port officials is imperative.** Movement on the waterways, whether from ocean ports or along river routes, requires a vast knowledge of environmental, maritime, and international issues. The port authorities will provide much of this needed information --- start early.
- **If the shipment requires overseas movement, bring customs officials into the early planning process.**
- **Tie-down procedures are different from that experienced with rail movement.** Learn the procedures and rehearse them if possible to make the process more efficient.
- **Bring reliable cell-phone communications to the port.**
- **Assemble, and have on-hand, environmental clean-up kits at the barge site.** Awareness of environmental concerns cannot be overemphasized.
- **Ensure barge size and space specifications are known early for configuration planning.** This will require close coordination with the port authorities and perhaps the shipping company. Configuring equipment aboard the barges must be planned.

CONCLUSION

Moving equipment for restationing, training, or to a combat zone has many of the same procedural components. This battalion engaged this operation in much the same way that will prove necessary for future situations. The battalion collected information, narrowed its mission and intent, clearly defined success, developed a task organization, and followed a logical series of phases to mission completion. Just as importantly, the battalion learned as it went along --- and learned quickly. Its lessons learned were quickly dispatched and fixes were put in place. Finally, the battalion used the great strengths of its soldiers to put the right man in the right place at the right time. **Moving units is part of our mission --- plan well and move to the sound of the guns!✪**

Combat Casualty Care in Stability and Support Operations

by CPT Timothy G. O'Haver, CALL CAAT, Bosnia

"Although the Army's primary focus is to fight and win our nation's wars, it is often employed in stability and support operations. In stability and support operations, the Army executes missions in both peace and conflict: what combat does occur is limited to the minimum necessary to support the political objectives." There is not a specific table of organization and equipment (TOE) medical unit that is designed to solely operate in stability and support operations. Therefore, planners must get involved early in the planning process to determine what Combat Health Support (CHS) assets will be required to support the operation. ***"The CHS planner must be capable of adapting traditional methods of health care delivery, leveraging technology, and establishing new procedures to meet the challenges presented."***

During Operation JOINT GUARD, units or elements without organic medical assets received Echelon I and II support on an area support basis. These support requirements were incorporated into the supporting units' OPLAN. The Medical Task Force located at the Blue Factory (Figure 1) served as the CHS Hub. The mission of the medical task force (ASMB(-)/CSH(-)) located at the Blue Factory was to provide Level II and III medical care, evacuation and medical regulating, medical logistics, area support (PM and Mental Health), response to contingency operations, veterinarian support and collateral missions.

The amount of published doctrine for stability and support operations pales in comparison to conventional Combat Health Support doctrine. This may have been the cause for the comment, "there is no doctrine to support this type of mission" by CHS planners when asked about how the CHS mission of OJG fits into the doctrinal templates previously established. The perceived doctrinal void required the CHS planner to adapt some innovative methods of health care delivery to meet the various challenges presented during this phase of OJG. The Doctrine writers at the Army Medical Department Center and School (AMEDDC&S) have revised and retitled FM 8-42. The new manual, **FM 8-42, *Combat Health Support in Stability Operations and Support Operations,*** 27 October 1997, has replaced the old FM 8-42, Medical Operations in Low Intensity Conflict. Newly developed doctrine ***must be*** provided to CHS planners that need it prior to deployment. Not only will this new doctrine give planners additional insight into unconventional deployments, but also it will provide an excellent venue for test and evaluation of newly developed doctrinal concepts. The graphic on page 28 depicts the medical array and is provided as a reference.

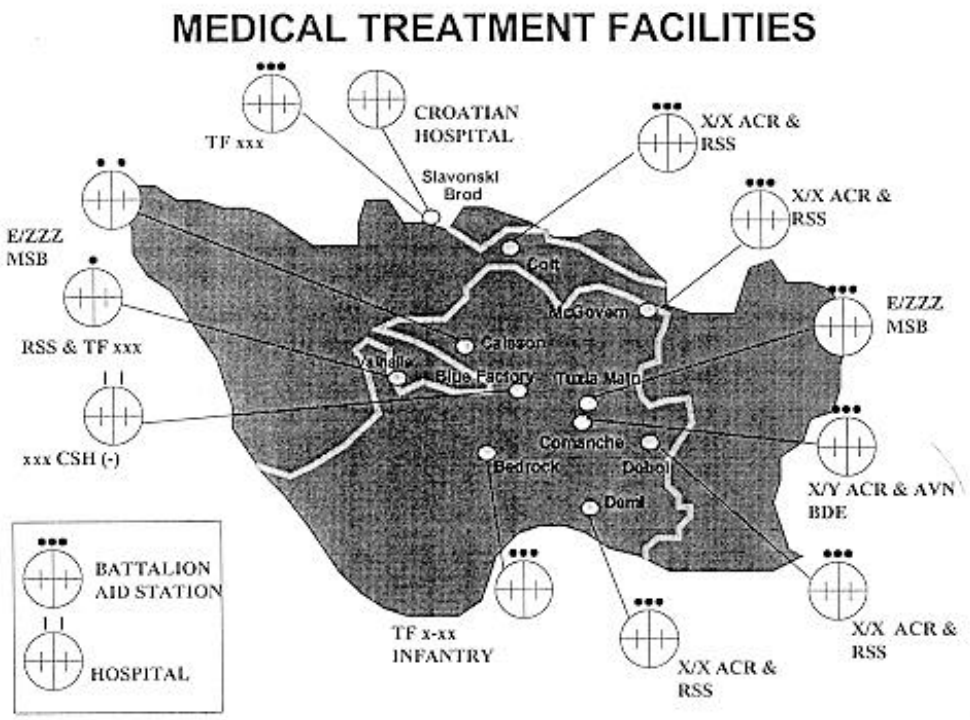


Figure 1. Locations of Medical Facilities in Bosnia-Herzegovina.

EXPANDING SCOPE OF PRACTICE

Before plans can be made to provide hospitalization and evacuation, there are certain problems that must be resolved by command decision. One such decision is the evacuation policy. It is established by the Secretary of Defense, with the advice of the JCS, and upon the recommendation of the theater commander. The policy established, in a number of days, the maximum period of non-effectiveness (hospitalization and convalescence) that patients may be held within the theater for treatment. The evacuation policy means different things to different people. To a direct patient care provider, it means that there is a maximum period within which clinical staffs may complete the treatment needed to return the patient to full duty within the theater. To the Health Service Support (HSS) planner, it means that, with this policy, he can compute the beds required in theater. This can be translated into the type, mix, number, and distribution of hospitals required in theater. Finally, to the HSS operator, it means he now has the management tool to balance patient care and tactical support requirements. The HSS operator will be able to tailor a HSS package specifically designed to handle patient workloads, with maximum benefit to the patients and with maximum economy of available resources. Combat Health Support planners along with the command surgeon develop a health service support estimate based on the situation. This estimate lends itself to the overall CHS plan. It is in this plan that the deploying medical force package, for a designated operation, begins to take form. The theater evacuation policy and the medical force package capabilities have remained somewhat constant since the onset of Operation JOINT ENDEAVOR.

Two years after the onset of Operation JOINT ENDEAVOR, a Medical Task Force (MTF) consisting of an Area Support Medical Battalion and a Combat Support Hospital, deployed in support of Operation JOINT GUARD as part of the United Nations Sustainment Force (SFOR). They deployed with a medical staff that rivals many 20-30 bed CONUS-based Medical Treatment Facilities. Their mission was to provide echelon II and III medical care, evacuation and medical regulating, medical logistics, area support (PM and Mental Health), response to contingency operations, and veterinarian support. The medical staff's wide range of specialties increased the Medical Task Force's medical capabilities. Unfortunately, this increase in capabilities did not translate to an increase in scope of practice as it related to direct patient care. The Combat Support Hospital had sent numerous patients out of theater and into Central Region for procedures that could have been accomplished in Bosnia. Patients sent to Central Region for minor surgical procedures were accepted by whomever was the on-call physician at the time. In many cases, patients arrived in Central Region without a scheduled appointment or waited weeks for minor surgical interventions that could have been accomplished while in theater. Health-care providers deployed in stability and support operations have proven to be willing and able to provide quality health care to the extent of their organizational capabilities and operational resources. In these types of operations--when medical assets have achieved conformity, continuity, control and proximity, and there is no longer a need for mobility--the Medical Brigade along with the CINC Surgeon must consider an increase in the scope of practice and possibly an adjustment of the evacuation policy. FM 8-55 suggests that when patients are received at a rather constant rate, the evacuation policy at a specific echelon may be adjusted to retain or return to duty those patients who do not require specialized treatment in communications zone general hospitals.

Tactics, Techniques and Procedures:

CINC Surgeon/Medical BDE must constantly assess medical capabilities within the theater of operations to determine the best way to provide combat health support.

As the mission changes and the theater develops, the CINC surgeon and the medical BDE need to establish trigger points which requires a re-evaluation of the theater evacuation policy and an increased scope of practice within theater.

MAINTAINING MEDICAL SKILL PROFICIENCIES

The medical Task Force established a medical training program to maintain certain skills such as Advanced Trauma Life Support (ATLS), Basic Trauma Life Support (BTLS) and Emergency Medical Technician (EMT) certification in the Task Force AOR. During support and stability-type operations, there is significant time available to conduct this type of training in country. ATLS, Trauma Nurse Core Course (TNCC) and EMT certifications are good for two years, and BTLS certification is good for one year. During extended deployments, many of these certifications expire. Some stateside universities offer medical training through correspondence modules; however, the materials can take weeks or even months to arrive in country. Inadequate time exists for a rapidly deploying force to ensure that deploying medical caregivers receive additional medical training that will maintain their certifications throughout the entire deployment.

Tactics, Techniques and Procedures:

Without adequate distance learning options available, perishable medical skills are severely at risk. The AMEDD must ensure training programs are packaged and deployed into an area of operation.

It is imperative that the unit maintain a significant number of instructor qualified personnel to validate certification courses.

Commanders of medical units must ensure that training options are available for courses such as EMT, ATLS, TNCC, and Continuing Medical Education (CME).

METL TRAINING-KEY TO SUCCESS

The medical TF received notification several months prior to deployment that they would take over the medical mission at the Blue Factory and serve as the combat health support HUB for Multi-National Division (North) (MND (N)). The unit went through an extensive trainup prior to deployment, which included individual training and collective mission essential task training. Soon after establishing medical task force operations, the ASMB and the Combat Support Hospital was evaluated by a Medical BDE validation team. The task force exercised its mass casualty plan which incorporated echelon I and II care, air and ground evacuation, echelon III care, and aeromedical evacuation/medical regulating from echelon III to the MASF. The exercise identified strengths and weakness while providing the units valuable direction in developing their mission-training plan (MPT). The exercise was a huge success considering this was the first time the ASMB and the Combat Support Hospital had trained together as a medical task force.

Tactics, Techniques and Procedures:

Units deploying into a theater of operation must develop a specific METL to support the overall mission as soon as they learn of the possibility of deployment.

Although Mission-Essential Task Lists (METLs) will change significantly for the maneuver units supported, medical METLs remain basically the same as they relate to evacuation and treatment of casualties. However, one way the METL does change is conducting combat health support with coalition forces.

Create a stability and support operation scenario for the Combat Training Centers (CTCs). Rotate medical units that will be providing echelons above division medical support, as a medical task force, through the CTC when feasible.

CONVOY POLICY AFFECTS MEDICAL MISSION

To provide the necessary force protection for U.S. servicemembers traveling in the MND(N) AOR, a four-vehicle convoy policy (with belt-fed weapon system) was established. This policy significantly hampered the mission of U.S. ground evacuation units. Because early response and speed are paramount in patient evacuation, the Norwegian SISU was the primary means of ground evacuation. The Norwegian vehicles were not required to travel in four-vehicle convoys, because their SISUs had been determined to provide adequate force protection for its occupants. However, the SISU did not have a belt-fed automatic weapon system nor was it required. As a result, eight SISUs from the NORDPOL BDE provided ground evacuation for a 6,150-square mile geographic area, while 33 M997 HMMWV ground ambulances sat idle. Although the medical task force task organized itself with the NORDPOL BDE to accomplish the medical mission, the policy handicapped the medical units providing echelon above division medical support, even in the accomplishment of routine missions. This policy had been in effect since the onset of Operation JOINT ENDEAVOR. Two years later, the same policy remained in effect. The U.S. mission in Bosnia had matured from peacemaking to peacekeeping, and now the *"lean"* was toward stability and support operations. With a change in threat, there should be a change in policy. This is especially the case in regard to medical units that are not properly resourced to effectively accomplish their mission while adhering to such policies. The threat level for U.S. forces during this particular phase of the operation was "low." The major threat was isolated acts of aggression or terrorism. Routine security tasks normally do not require medical units to provide their own security during evacuation missions or during routine resupply activities along MSRs, aside from personal/patient protection measures. Route security is usually maintained by the Military Police, the personnel that are authorized and trained in the use of belt-fed automatic weapons. Although this policy was rigid for medical units, in some cases it did not apply to other units traveling the MSRs in the Task Force Eagle AOR. This led to many debates on the validity of the policy.

Tactics, Techniques and Procedures:

Blanket policies established within theater need to be evaluated to determine their detriment to unit mission capabilities.

It can be inferred that because this policy has been successful since its inception, the policy will continue in future deployments. We must identify the resources and necessary doctrinal changes needed to allow our medical units to perform their mission effectively.

To perform their evacuation, treatment and daily routine missions effectively, leaders must determine if the need for medical units to increase their force protection posture through the addition of crew-served weapons and escort vehicles outweigh the need for a more capable evacuation vehicle (i.e., Norwegian SISU).

MEDICAL MULTI-NATIONAL TRAINING EXERCISES

In an attempt to provide seamless medical support throughout MND (N), the Medical Task Force located at Guardian Base along with coalition medical assets conducted an exercise to test their emergency preparedness. In doing so, the exercise also identified some weakness that existed between coalition and U. S. connectivity. The Area Support Medical Battalion (ASMB), serving as the command and control of the medical task force, coordinated a mass casualty exercise which included sling-load operations. The Medical TF sling-loaded one cargo HMMWV and one cargo net carrying a treatment module with a 10-bed hold capability to augment the Finnish Battalion aid station located at Doboi in the northwest region of MND(N) AOR. The exercise kicked off with a simulated car bombing at the Nordpol base camp. Once the ASMB's equipment and personnel reached the location, they quickly set up their treatment area in the Finnish Dining Facility to support medical operations. Because of the lack of communication, hampered by incompatible communications equipment (either by design or preference), differences in CHS doctrine, unfamiliarity with the U.S. treatment team capabilities and the obvious language barrier, the ASMB treatment team was never used by the Finnish medical unit.

Figure 2. U.S. and Turkish soldiers during a MEDEVAC training exercise.

Tactics, Techniques and Procedures:

It is imperative that coalition medical assets conduct multiple combined training exercises to blend doctrine, which will ensure seamless combat health support. Interoperability is the key to success.

The capabilities of coalition medical assets need to be clearly understood by all units providing combat health support.

Combat Health Support planners' experience in support and stability operations are limited in comparison to conventional military operations. Planners will continue to experience many trials and tribulations that will lead to significant lessons learned. These lessons learned will provide the baseline for CHS in future operations. Through the development of new doctrine and innovative Techniques, Tactics and Procedures, the Army Medical Department can ensure medical commanders in the field have all the necessary tools to provide the best combat casualty care and conserve the Army's fighting strength.✪

30 YEARS LATE, BUT *READY TO SERVE* –

The South African Nyala

By 1LT Adam Geibel (New Jersey NG) and Larry Whelan (SGT,USA)

South Africa has had a long and painful experience with mine warfare, beginning with the opening chapter of the Angolan Civil War (1975-76) and running through the Namibian insurgency of the 1980s. Because of a UN embargo, South African industry had to develop a way to protect the soft-skin transports upon which their army so heavily relied.

The result was a family of Mine-Protected Vehicles (MPVs) that are now offered for sale on the world market. When the U.S. Army went to Haiti, they were still using 2½- and 5-ton trucks for cargo duty in mine threat areas with sandbags lining the floor and iron plates bolted to the sides. This was the same field-expedient used in Vietnam 30 years earlier.

However, in the fall of 1996, the U.S. Army had five RG 31 Nyalas sent to Aberdeen Proving Ground, MD, for testing and possible deployment to mine-strewn Bosnia. This is the same type of vehicle selected by the UN for use with UNPROFOR and NATO's IFOR in the same area (when UNPROFOR withdrew from Bosnia, their RG-31s were redeployed with UNIFIL to Lebanon). The U.S. Army also retained an option for purchasing another five vehicles, as well as a comprehensive technical and logistical support package.

The RG-31 Nyala is a 4X4 multipurpose personnel carrier suitable for security-related applications where driver and crew safety is of prime importance. Its armor offers protection against small arms fire, and the vehicle is designed to run over two Soviet TM-57 antitank landmines (each with 15,.428 lbs of TNT) or have one detonate under the hull without harm to the passengers.

The Nyala APC is 5.88m long, 2.3m wide and 2.27m high. It weighs 8,400kg, has a 125kw six-cylinder diesel and four-speed automatic transmission. The Nyala has a range of 950km and maximum speed of 105km/hr; it can go from 0 to 80km/hr in 26 seconds.

The original versions, purchased by the South African National Defense Force, have right-hand drive and a seating capacity of 11, as well as roof hatches. The U.S. Army version has left-hand drive; 8-seat configuration and provision for an auxiliary diesel-powered heater for use when the vehicle engine is off.

Mine warfare is a Threat method of attack that is rising sharply. In addition to the standard "bury and forget" mines, Command Detonated Mines (CDMs, which can be as simple as a 152/155 mm HE shell fused with det cord and communication wire to an electric igniter – imagine a large Claymore) are becoming increasingly popular.

In early 1995, St. Petersburg (Russia) police arrested a group manufacturing remote-control bombs using car alarms as actuators and explosives taken from World War II German air force bombs dug up from old battlefields around the city. These were being sold to Chechen revolutionaries and used, along with a series of similar Command Detonated Mines, in a series of extremely effective and bloody attacks against politicians and military leaders. The U.S. Army also suffered seven CDM attacks when it was deployed to Somalia.

Lesson Learned: **Knowing how information flows through terrorist organizations in the world, and considering ongoing and future contingency operations, the use of command detonated mines in domestic terrorist or organized crime situations is a growing possibility.✪**

Demining Operations Using the Minebreaker 2000 System in Bosnia-Herzegovina

By MAJ Frank Akins, CALL

Figure 1. **The Minebreaker 2000 "tiller" component destroys mines in place (FFG).**

During a recent mission to Bosnia-Herzegovina, I observed the Minebreaker 2000 Mine Removal System in action. (See Figures 1 and 2). It is mounted on a modified German Leopard tank chassis which was regeared to move at farm tractor speeds. It is manufactured by FFG of Germany. The Minebreaker 2000 mine destroyer component utilizes principles of speed and mass to quickly destroy mines in place by using a quick "roto-tiller" action (Figure 1). It spins, by hydraulic action, a large spiked cylinder on the back of the Leopard chassis for protection of the hydraulic unit and for counterbalance of the front nose of this machine. The tilling action destroys the mines faster than they can detonate. This system is not operated by remote control. The operator sits safely mid-center in an armored cab (Figure 1).

The Minebreaker 2000 system works well on relatively level pieces of ground with light vegetation. It can process over 20,000 m^2 of ground per day. It is not designed to work in wooded and/or rough terrain. The system is very effective when used properly. Farmers benefit from use of the system since the field is tilled and cleaned of debris during the mine removal operation.

You may contact Mr. Dieter Kirchhoff for more information concerning the Minebreaker 2000. His address and phone number are:

Dieter Kirchhoff,
Consultant, Humanitarian Demining
Gunter-Eich-Str-5, D 81927
Muchen, Germany
Tel/FAX + + 49/89/93 34 91

Figure 2. **The "sifter" portion of the Minebreaker 2000 system collects destroyed mine fragments after the "tiller" churns the field (FFG).**